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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,086	09/29/2003	John M. Matechen	3580-031452	2169
28289	7590	12/14/2004		
WEBB ZIESENHEIM LOGSDON ORKIN & HANSON, P.C. 700 KOPPERS BUILDING 436 SEVENTH AVENUE PITTSBURGH, PA 15219			EXAMINER WELCH, GARY L	
			ART UNIT 3765	PAPER NUMBER

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/674,086

Applicant(s)

MATECHEN, JOHN M.

Examiner

Gary L. Welch

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-41 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09292003.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

Reference number 15 (page 4, line 11) is not disclosed in the drawings.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: It appears that the following changes are required:

Page 6, line 16: Change "10c" to --100-- (see Figure 2)

Page 9, line 6: Change "197" to --198--

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levesque et al. (U.S. 6,721,960).

Levesque et al. discloses a vibration dissipating sports glove (Figure 5) for use in holding a bat while hitting a baseball wherein portions of the glove correspond to bones in a wearer's hand to which the glove is intended to cover. The glove includes a palm portion excluding a thumb, a back portion excluding a thumb and a thumb portion coupled to the palm portion (Col. 2, line 67-Col. 3, line 4; this section states that the glove is fabricated from multiple sections and pieced together). A vibration dissipating front pad 122 is provided in the palm portion and extends over and between the proximal knuckles of the thumb, index finger and middle finger and along adjacent portions of the metacarpal bones and proximal phalanges of each thumb and finger while leaving the remainder portion of the palm unpadded. The front pad 122 is a single pad (Col. 3, lines 43-45) and may cover less or more area as desired (Col. 3, lines 45-47) and therefore will cover only the claimed portions and leave the remainder of the palm uncovered. The advantages of the claimed limitations is to ensure maximum protection from impacts while still maintaining flexibility of the hand (i.e., only selected portions of the hand protected while the remainder of the palm is unprotected).

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Levesque et al. also is concerned with maximum protection while maintaining the remainder of the palm unprotected to ensure flexibility. Therefore, it would have been well within the level of ordinary skill in the glove making art to apply the teaching of Levesque et al. to size the pad 122 to only cover the claimed areas to ensure maximum impact protection while maintaining hand flexibility.

With regard to claim 2, the front pad 122 extends along the index finger metacarpal bone and proximal phalange on the index finger a distance and the front pad 122 extends along the middle finger metacarpal bone and proximal bone phalange a distance which is no more than $\frac{1}{2}$ the index finger distance (Figure 5, Col. 3, lines 45-47 which allows the pad to be sized to cover various areas of the hand).

With regard to claim 3, the pad 122 extends to the proximal knuckle of the ring finger (Figure 5).

With regard to claim 4, the front pad 122 is generally "T"-shaped (Figure 5).

With regard to claim 5, the pad 122 extends over the proximal phalange of the thumb. As stated in Col. 3, lines 45-47, the pad may be sized to cover less area and therefore can be sized to terminate before the distal knuckle.

With regard to claim 6, the invention is disclosed in the above rejections to claims 3 and 5.

With regard to claim 7, the pad 122 is filled with an energy dissipating conformable media such as foam (Col. 3, lines 20-28).

With regard to claim 8, the pad 122 is of sufficient thickness to conform to the bat and to the batter's hand such that any gaps that would naturally occur between the bat and the

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batter's hand in the region of the pad are minimized thereby providing the batter with a more secure grip.

With regard to claim 38, the invention is disclosed in one or more of the above rejected claims.

5. Claims 9 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levesque et al. (U.S. 6,721,960) in view of Rhoades et al. (U.S. 6,701,529).

Levesque et al. discloses the invention substantially as claimed above.

However, Levesque et al. does not disclose that the media is poly(borosiloxane).

Rhoades et al. teaches padding for use in sports articles (i.e., gloves) for absorbing energy from impacts, shock or vibration. Polyborosiloxane is the material used in the padding because of its conformable cushioning and support ability to conform to the anatomy of the object and user thereby providing a high impact energy system (Col. 7, lines 26-37; Col. 10, lines 17-27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to manufacture the padding of Levesque et al. from polyborosiloxane as taught by Rhoades et al. since polyborosiloxane provides conformable cushioning and support ability to conform to the anatomy of the object and user thereby providing a high impact energy system (Col. 7, lines 26-37; Col. 10, lines 17-27).

With regard to claim 39, the invention is disclosed above.

With regard to claim 40, the media is encapsulated in plastic 14 (Col. 4, lines 37-42).

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With regard to claim 41, the plastic is polyurethane (polyurethane is a relatively non-porous fabric).

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Levesque et al. (U.S. 6,721,960) in view of Widdemer (U.S. 6,052,827).

Levesque et al. discloses the invention substantially as claimed above.

Furthermore, the glove is fabricated from nylon (Col. 3, lines 4-6).

However, Levesque et al. does not disclose that the pad is leather.

Widdemer teaches a vibration reducing sports glove having padding fabricated from leather (Col. 2, lines 9-20), which is attached to the glove material. The leather padding allows the glove to be very thin and flexible so as to allow the golfer to "feel" the club while providing vibration protection. This concept would apply to baseball players since they would benefit from a very thin and flexible glove while gripping a baseball bat.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the padding of Levesque et al. with leather padding as taught by Widdemer so as to provide a glove that is very thin and flexible thereby allowing the user to "feel" the club or bat while providing vibration protection.

7. Claims 11, 12, 14, 27-29, 32, 33, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levesque et al. (U.S. 6,721,960) in view of Baylor et al. (U.S. 5,898,938).

Levesque et al. discloses the invention substantially as claimed above.

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However, Levesque et al. does not disclose back padding at the back portion of the glove covering only the metacarpal bones of the index finger, middle finger, ring finger and small finger.

Baylor et al. teaches a baseball glove having back padding 121 overlaying the metacarpal bones of all the fingers (Col. 3, lines 18-33) so as to provide protection to the user's back hand from a thrown baseball as shown in Figures 1 and 2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the glove of Levesque et al. with back padding overlaying the metacarpal bones of all the fingers as taught by Baylor et al. so as to provide protection to the user's back hand from a thrown baseball.

With regard to claim 12, the front and back pads are comprised of energy absorbing media.

With regard to claim 14, the back padding 121 is a single flat pad.

With regard to claim 27, a knuckle pad 122 is provided at each of the middle knuckles of each finger and thumb (see Figure 5 of Levesque et al.). Furthermore, as stated above, the pad 122 can be sized to cover less or more area. The advantages of the claimed limitations is to ensure maximum protection from impacts while still maintaining flexibility of the hand (i.e., only selected portions of the hand protected while the remainder of the palm is unprotected). Levesque et al. also is concerned with maximum protection while maintaining the remainder of the palm unprotected to ensure flexibility. Therefore, it would have been well within the level of ordinary skill in the glove making art to apply the teaching of Levesque et al. to size the pad 122 to only

cover the claimed areas to ensure maximum impact protection while maintaining hand flexibility.

With regard to claim 28, the claimed ratios are not disclosed by Levesque et al. or Baylor et al. However, the specification does not offer any criticality (unexpected results) for the claimed ratio. Therefore, it would have been well within the level of one of ordinary skill in the glove making art to manufacture the pads with the claimed ratio in order to provide a predetermined level of protection and flexibility.

With regard to claim 29, the knuckle pads are comprised of energy dissipating conformable media.

With regard to claims 32, 33, 36 and 37, the invention is disclosed in one or more of the above rejected claims.

8. Claims 13, 24-26 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levesque et al. (U.S. 6,721,960) in view of Baylor et al. (U.S. 5,898,939) as applied to claim 12 above, and further in view of Rhoades et al. (U.S. 6,701,529).

Levesque et al. and Baylor et al. disclose the invention substantially as claimed above.

However, they do not disclose that the energy dissipating conformable media is (poly)borosiloxane.

Rhoades et al. teaches padding for use in sports articles (i.e., gloves) for absorbing energy from impacts, shock or vibration. Polyborosiloxane is the material used in the padding because of its conformable cushioning and support ability to

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conform to the anatomy of the object and user thereby providing a high impact energy system (Col. 7, lines 26-37; Col. 10, lines 17-27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to manufacture the padding of Levesque et al. from polyborosiloxane as taught by Rhoades et al. since polyborosiloxane provides conformable cushioning and support ability to conform to the anatomy of the object and user thereby providing a high impact energy system (Col. 7, lines 26-37; Col. 10, lines 17-27).

With regard to claims 24-26 and 30, the invention is disclosed in one or more of the above rejected claims.

9. Claims 15-20, 22, 23, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levesque et al. (U.S. 6,721,960) in view of Baylor et al. (U.S. 5,898,938) as applied to claim 11 above, and further in view of Gold (U.S. 5,067,175).

Levesque et al. and Baylor et al. disclose the invention substantially as claimed above.

However, they do not disclose that the back padding is comprised of a plurality of discrete strips each containing energy dissipating conformable media.

Gold teaches a padded glove 100 having back padding comprised of a plurality of discrete strips (15-18) each containing energy dissipating conformable media (45-48) therein for protecting the user's back hand portion (note: the padding can be sized to cover a lesser or greater portion of the glove as described in Col. 5, lines 38-40) while

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avoiding unnecessary bulkiness, restricting flexibility or affecting the normal pattern or geometry of the glove (Col. 3, lines 15-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the single pad of Baylor et al. with a plurality of discrete strips of energy dissipating conformable media as taught by Gold so as to provide protection to the user's back hand portion while avoiding unnecessary bulkiness, restricting flexibility or affecting the normal pattern or geometry of the glove (Col. 3, lines 15-25).

With regard to claims 16-19, neither Levesque et al. nor Baylor et al. nor Gold disclose the claimed ratios. However, the specification does not offer any criticality (unexpected results) for the claimed ratios. Therefore, it would have been well within the level of one of ordinary skill in the glove making art to manufacture the pads with the claimed ratio in order to provide a predetermined level of protection and flexibility.

With regard to claim 20, the glove has a central axis and the plurality of strips (15-18) are aligned with the central axis (Figure 2 of Gold).

With regard to claim 22, the strips are parallel to one another and form an angle with the central axis of between 0-90 degrees (Figure 2 of Gold).

With regard to claim 23, the plurality of strips (15-18) form parallel curved surfaces on the glove (note shapes of strips disclosed in Figure 8).

With regard to claims 34 and 35, the invention is disclosed in one or more of the above rejected claims.

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10. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Levesque et al. (U.S. 6,721,960) in view of Baylor et al. (U.S. 5,898,938) and Gold (U.S. 5,067,175) as applied to claim 15 above, and further in view of Huang (U.S. 6,425,134).

Levesque et al., Baylor et al. and Gold disclose the invention substantially as claimed above.

However, they do not disclose that the plurality of strips are perpendicular to the central axis.

Huang teaches a protective glove having a plurality of discrete strips of energy dissipating conformable media 10 disposed perpendicular to the central axis of the glove (Figure 16). While Huang does not disclose why he chose the plurality of discrete strips being oriented perpendicular to the central axis of the glove, it would have been through routine experimentation to position the strips of Gold in the perpendicular orientation along with flex lines 13 as taught by Huang in order to provide increased flexibility when the back of the hand is clinched (as in gripping a bat) thereby ensuring a more flexible and comfortable glove.

11. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Levesque et al. (U.S. 6,721,960) in view of Baylor et al. (U.S. 5,898,938) as applied to claim 11 above, and further in view of Terris et al. (U.S. 6,775,847).

Levesque et al. and Baylor et al. disclose the invention substantially as claimed above.

However, they do not disclose that the wrist portion includes a pad containing an energy dissipating conformable media.

Terris et al. teaches a sports glove 100 having a wrist portion 116 containing an energy dissipating conformable media 150b for protecting the user from various medical conditions such as wrist tendonitis (Col. 11, lines 30-32) while participating in sports where swinging an item such as a club or bat to hit a ball is involved.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the wrist portion of Levesque et al. with an energy dissipating conformable media as taught by Terris et al. in order to protect the user from wrist tendonitis when he or she impacts a ball with a club or bat.

Conclusion

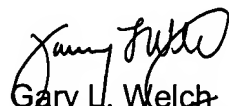
12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kleinert '465 discloses a glove having padding disposed across portions of the metacarpals while allowing the remainder of the palm to be unprotected. Webster '642, Beal '648, Arena '529 and Stanley et al. '122 disclose various hand coverings with padding disposed on selected areas of the palm for protecting particular joints from the effects of vibration, impact and shock. Thurston et al. '849 discloses protective padding disposed on the back hand portion of the glove in parallel discrete strips. Winningham '795, Kleinert '372 and Snyder et al. '312 disclose various hand coverings with protective padding disposed on the back hand portion of the glove for protecting the metacarpal bones of the fingers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Welch whose telephone number is (571) 272-4996. The examiner can normally be reached on Mon-Fri 5:30-3:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John J. Calvert can be reached on (571) 272-4983. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gary L. Welch
Primary Examiner
Art Unit 3765

glw